

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method for generating a continuous stream of liquid solder metal droplets for selective application to locations on a substrate comprising:
positioning a substrate on a stationary support;
producing a continuous stream of liquid solder metal droplets from a reservoir of liquid solder metal;
selectively directing said stream of liquid solder metal droplets in a first dimension and a second dimension, such that solder is deposited at said locations on a substrate located on a stationary support, said selectively directing comprising:
raster scanning said stream of liquid solder metal droplets, said raster scanning including
electrically charging said stream of liquid solder metal droplets;
electrostatically deflecting said electrically charged stream of liquid solder metal droplets
in a first variable electrostatic potential in said first dimension for contacting portions of a substrate located on a stationary support;
electrostatically deflecting said electrically charged stream of liquid metal droplets in a
second variable electrostatic potential in said second dimension to said locations
on said substrate located on a stationary support; and
blanking selectively said stream of liquid solder metal droplets to prevent a portion of
said stream of liquid solder metal droplets from contacting said substrate located on a stationary support.
2. (Currently Amended) The method according to claim 1, wherein said producing [step] further comprises:
heating a solder metal to a liquid state in the reservoir; and
controlling a temperature of the liquid solder metal in the reservoir for providing said stream of liquid solder metal droplets in said liquid state while selectively directing said stream of

liquid solder metal droplets for contacting portions of a substrate located on a stationary support.

3. (Currently Amended) The method according to claim 1, wherein said producing [step] further comprises:

inducing a pressure on a source of liquid metal; and

vibrating said liquid metal to cause said stream of liquid solder metal droplets to be formed as said pressure is induced on said source of liquid metal.

4. (Currently Amended) The method according to claim 3, wherein said pressure inducing [step] is generated by a first piezoelectric crystal driven by a given frequency to produce a desired pressure.

5. (Currently Amended) The method according to claim 4, wherein said vibrating [step] is generated by a second piezoelectric crystal driven by a selected frequency to produce a given vibration frequency sufficient enough to form droplets having a diameter in the range of 40 microns to 300 microns.

6. (Currently Amended) The method according to claim 1, wherein said producing [step] further comprises forming said stream of liquid solder metal droplets having a consistent diameter in the range of 40 microns to 300 microns.

7. (Currently Amended) The method according to claim 1, wherein said blanking [step] comprises blanking when said stream of liquid solder metal droplets is positioned between an endpoint of a first horizontal scan line and a start point of a second horizontal scan line with respect to a substrate located on a stationary support.

8. (Currently Amended) The method according to claim 1, wherein said blanking [step] further comprises:

deflecting said stream of liquid solder metal droplets; and
catching said deflected stream of liquid solder metal droplets to prevent said drops from being
deposited on said substrate located on a stationary support.

9. (Currently Amended) The method according to claim 1, wherein said directing
[step] comprises programmably controlling a direction of said stream of liquid solder metal
droplets for deposition on portions of a substrate located on a stationary support.